The Technology Review

Vol. XIV

JUNE, 1912

No. 6

ALUMNI FUND GROWING SATISFACTORILY

Absolute need of over a million dollars for necessary purposes, unprovided for unless Alumni furnish the money

At the end of two months the Alumni Fund had reached the sum of \$355,915.20 contributed by 1468 men, or about 16% of the 9152 former students of the Institute.

The chairmen of the class and local committees in the vicinity of Boston held a meeting at the University Club recently and discussed the Fund in its various bearings. The important fact was brought out that the former students of the Institute do not seem to understand the absolute necessity of a large Alumni Fund, believing that the benefactions which Tech has received will be sufficient for all its building purposes.

The fact of the matter is, that, although the purchase of the land has been provided for, although money has been promised for the erection of the educational buildings, and the State has practically guaranteed that there shall be no deficit in the running expenses of the Institute during the next ten years, there is not one dollar available for certain purposes which are not only necessary but which must be provided for at the very outset.

It was distinctly understood by the donor of the money for the buildings, that the former students of the Institute would provide for the future social life of the students, as this was one of the items in which Tech men are particularly interested, and to which they had already subscribed a considerable sum for the Walker Memorial. It will, however, take not only all the money that has been raised for the Walker Memorial, but all that has been thus far subscribed to the Alumni Fund to make suitable provision for this purpose in keeping with the

other buildings.

Other things which must be provided by the alumni are even more important although perhaps less attractive. The filling in and beautifying of the grounds must be taken care of and more important still are the underground constructions which must be cared for at the very beginning of the work. The fact that these latter expenditures do not appeal particularly to sentiment will hardly affect the former students of the Institute, who, a few years ago, subscribed a quarter of a million dollars to pay for coal bills and similar items. The Alumni Fund committee needs every dollar that it has started out to secure, or nearly four times the amount already subscribed. Not only must this money be forthcoming, but it must be pledged before the

technology review

Published by MIT

This PDF is for your personal, non-commercial use only.

Distribution and use of this material are governed by copyright law.

For non-personal use, or to order multiple copies please email permissions@technologyreview.com.

Class	Subscribers		(a) % of	(b) % of	Class S	Total	
		Amount	men subscribing	amount subscribed	a	b	Point
'68	4	\$7050.00	18.2	72.8	13	3	16
'69	4	1610.00	18.2	17.	14	24	38
'70	5	875.00	13.2	5.5	31	42	73
'71	5	600.00	11.9	3.48	34	44	78
'72	5	1700.00	17.2	14.6	17	27	44
'73	10	9550.00	21.3	52.1	5	9	14
'74	8	1110.00	12.7	4.63	33	43	76
'75	11	3280.00	14.3	11.5	25	32	57
'76	11	19325.00	14.7	71.5	24	4	28
'77	9	2280.00	13.4	9.85	30	36	66
'78	9	9975.00	20.	65.1	6	7	13
'79	13	3885.00	19.7	18.7	8	20	28
'80	4	3750.00	14.3	43.	26	10	36
'81	23	11490.00	38.4	61.8	1	8	9
'82	3	1500.00	5.17	8.62	44	40	84
'83	3	1250.00	5.46	7.84	43	41	84
'84	12	3090.00	15.4	14.1	21	29	50
'85	21	23575.00	23.4	96.8	3	2	5
'86	11	2335.00	11.1	9.06	36	39	75
'87	14	5675.00	8.62	14.	41	30	71
'88	38	64490.00	22.5	159.	4	1	5
'89	34	12190.00	19.5	29.7	9	13	22
'90	32	13140.00	17.7	33.	16	12	28
'91	36	8941.00	20.	23.6	7	16	23
'92	17	4100.00	7.87	9.49	42	37	79
'93	57	39980.00	18.6	70.1	12	5	17
'94	24	7010.00	8.9	14.4	40	28	68
'95	36	8570.00	15.4	21.4	22	17	39
'96	43	8675.00	13.7	17.3	29	23	52
'97	26	4175.00	10.1	10.8	37	35	72
'98	39	9645.00	11.4	20.2	35	18	53
'99	40	3955.00	14.2	10.8	28	34	62
'00	30	3440.00	9.81	9.37	38	38	76
'01	41	4335.00	13.	12.5	32	31	63
'02	30	3555.00	9.53	11.3	. 39	33	72
'03	54	4525.00	17.1	15.9	19	25	44
'04	56	5630.00	14.3	18.	27	22	49
'05	94	6525.00	18.7	18.5	11	21	32
'06	82	5660.00	17.2	19.8	18	19	37
'07	71	3412.00	16.2	15.6	20	26	46
'08	85	4960.00	18.2	26.6	15	14	29
'09	92	3750.00	19.3	26.2	10	15	25
'10	113	3750.00	23.8	37.6	2	11	13
'11	98	2350.00	15.4	70.1	23	6	29

How the classes stand at the end of two months.

4

buildings are erected, as the work on conduits, sewers and grounds must be begun even before the erection of the

buildings.

The sum already raised has been contributed in response to letters, very little personal solicitation having been employed. In the fall it is planned to begin a thoroughly organized campaign and if possible to secure some contribution, however small, from every former student of the Institute.

Soon after the Fund was started a member of the class of '90, which has been out twenty-two years, offered to contribute \$220.00, or \$10.00 for every year out, for every contribution of the same amount or over from a member of the class. He has already been called on for twenty or more subscriptions of \$220.00 each; and now another member of the same class has made a similar offer, so that for every contribution of \$220.00 or over a sum of \$440.00 additional is added to the class fund.

The tables herewith show the position of the classes and the geographic centers

at the end of two months.

The following list shows the classes in the order of merit.

	CLASS	POINTS		CLASS	POINT
1.	'85	5	23.	'03	44
2.	'88	5	24.	'07	46
3.	'81	. 9	25.	'04	49
4.	'78	13	26.	'84	50
5.	'10	13	27.	'96	52
6.	'73	14	28.	'98	53
7.	'68	16	29.	'75	57
8.	'93	17	30.	'99	62
9.	'89	22	31.	'01	63
10.	'91	23	32.	'77	66
11.	'09	25	33.	'94	68
12.	'76	28	34.,	'87	71
13.	'79	28	35.	'97	72
14.	'90	28	36.	'02	72
15.	'08	29	37.	'70	73
16.	'11	29	38.	'86	75
17.	'05	32	39.	'74	76
18.	'80	36	40.	'00	76
19.	'06	37	41.	'71	78
20.	'69	38	42.	'92	79
21.	'95	39	43.	'82	84
22.	'72	44	44.	'83	84

It will be noticed that '88, which has given by far the largest contribution, nearly 160% of its assessment, has increased its contributors until it is practically at the head of the list, '85 taking precedence merely by virtue of its age, each class having the same number of points, five each. The class of '09 has jumped from 16th place to 11th; the class of '10 from 8th to 5th place; the class of '94 from No. 38 to No. 20, and the class of '94 from No. 40 to No. 33. '71 has gone up three points in two weeks and '00 the same number.

A good deal of rivalry has sprung up between the various geographical centers. In the order of merit the different local-

1. Canal Zone.....

2. Cuba.....

ities stand as follows:

14.	Cuba	T
3.	Akron	8
4.	Buffalo	9
5.	Cleveland	13
6.	St. Louis	13
7.	Syracuse	14
8.	Boston	22
9.	Chicago	26
10.	Minneapolis	26
11.	Providence	27
12.	Indianapolis	32
13.	Birmingham	36
14.		36
15.	Pittsburgh	37
16.	Rochester	39
17.	Japan	41
18.	Connecticut	43
19.	Maine.	44
20.	New York City	44
21.	Portland, Ore	44
22.	Tennessee	44
23.	Milwaukee	48
24.	Los Angeles	49
25.	San Francisco	49
26.	Philadelphia	50
27.	Denver	52
28.	Detroit	52
29.	Massachusetts Misc	54
30.	Steelton	54
31.	Savannah	57
32.	Spokane	58
33.	Springfield	58
34.	Texas	58
35.	Canada	62

36. Worcester	66	55. Foreign Misc 109
37. Baltimore	69	
38. Wilmington	73	In the above list there have been great
39. New Hampshire	73	changes in two weeks. Canal Zone
40. Atlanta	76	has moved from 7th place to 1st; Buffalo
41. Tacoma	76	from 13 to 4; Providence from 15 to 11;
42. Washington, D. C	76	Chicago from 22 to 9; Indianapolis from
43. Kansas City	77	26 to 12; Pittsburg from 27 to 15; Sche-
44. Lowell	81	nectady from 29 to 14; Tennessee and
45. Cincinnati	85	Kentucky from 31 to 22; Birmingham
46. Hawaii	91	from 38 to 13; San Francisco from 41
47. Fall River	92	to 25; Steelton, Pa., from 42 to 30; and
48. Columbus, Ohio	93	Denver from 48 to 27. These are the
49. Mexico	94	most important advances. Of course
50. Pittsfield, Mass	97	some of the other localities have gone
51. New Bedford	99	down on the list.
52. Vermont	99	The table which follows gives the
53. Seattle	103	details of the Fund with reference to the
54. Manila	109	various geographic localities:

	b- ers	men ist.	Amount	\$10.00 Basis	(a) % of men sub- scribing	(b) % of amount subscribed	Standing		Total
District	Sub-	No. men in dist.					a	b	Points
Akron, Ohio	21	41	\$1340.	\$3870.	51.3	34.7	1	7	8
Atlanta	4	27	235.	3190.	14.7	7.37	33	43	76
Baltimore, Md	15	87	700.	11060.	17.3	6.33	24	45	- 69
Birmingham, Ala	7	40	1000.	4160.	17.5	24.	23	13	36
Buffalo, N. Y	21	88	7205.	10080.	23.9	71.4	5	4	9
Boston, City of	233	1243	166675.	219210.	18.7	76.3	19	3	22
Canal Zone	3	7	525.	600.	42.8	87.5	2	2	4
Chicago, Ill	74	338	11935.	53470.	21.9	22.3	9	17	26
Cincinnati, Ohio	9	89	1585.	12780.	10.1	12.4	47	38	85
Cleveland, O	25	113	5855.	15640.	22.1	37.4	8	5	13
Columbus, O	4	39	250.	5140.	10.2	4.87	45	48	93
Connecticut (State)	37	190	3900.	22390.	19.5	17.4	16	27	43
Cuba	7	18	1825.	1580.	38.9	115.2	3	1	4
Denver, Colo	16	131	1050.	15430.	12.2	6.8	41	46	87
Detroit, Mich	18	113	2725.	14540.	15.9	18.8	28	24	59
Fall River, Mass	3	54	1100.	9570.	5.56	11.5	53	39	92
Hawaii	2	16	110.	2440.	12.5	4.50	40	51	91
Indianapolis, Ind	9	54	2425.	6690.	16.7	36.3	26	6	39
Japan	2	13	550.	2060.	15.4	26.7	30	11	41
Kansas City, Mo	8	61	660.	7840.	13.1	8.43	36	41	77
Los Angeles, Calif	14	111	4725.	16410.	12.6	28.8	39	10	49
Lowell, Mass	33	319	5635.	45090.	10.3	12.5	44	37	81
Maine, State of	25	122		17790.	20.5	13.9	11	33	44
Manila, P. I	1	25	50.	2160.	4.	2.32	54	55	109
Massachusetts, Misc.	213	1538	39789.	188520.	13.9	21.1	35	19	54
Milwaukee, Wis	9	61	2045.	8530.	14.7	24.	34	14	48
Minneapolis, Minn	20	100	3410.	13330.	20.	25.6	14	12	26
New Bedford, Mass	10	98	620.	16080.	10.2	3.86	46	53	99
New Hampshire (State)	15	115		16030.	13.1	13.4	37	36	75

	Sub- scribers	No. men in dist.	Amount	\$10.00 Basis	(a) % of men sub- scribing	(b) % of amount subscribed	Standing		Total
District							a	b	Points
New York City	183	1023	28745.	144840.	17.9	19.8	22	22	44
Philadelphia, Pa	36	197	4095.	26940.	18.3	15.2	20	30	50
Pittsburg, Pa	38	178	4415.	23430.	20.4	18.8	12	25	37
Pittsfield, Mass	5	50	335.	7480.	10.	4.47	48	49	97
Portland, Ore	11	52	930.	6330.	20.2	14.7	13	31	44
Providence, R. I	38	167	4695.	22390.	22.7	20.9	7	20	27
Rochester, N. Y	10	55	1335.	6240.	18.2	21.4	21	18	39
San Francisco, Cal	28	149	2830.	19880.	18.8	14.2	17	32	49
Savannah, Ga	8	52	1585.	8570.	15.4	18.5	31	26	57
Schenectady, N. Y	23	115	2825.	14050.	. 20.	20.1	15	21	36
Seattle, Wash	4	61	285.	7230.	6.56	3.94	51	52	103
Steelton, Pa	9	52	985.	5920.	17.3	16.7	25	29	54
St. Louis, Mo	20	73	2770.	9060.	27.4	30.6	4	9	13
Spokane, Wash	10	86	2320.	10380.	11.6	22.4	42	16	58
Springfield, Mass	11	104	3495.	15110.	10.6	23.1	43	15	58
Syracuse, N. Y	15	66	2325.	6780.	22.8	34.4	6	8	14
Tacoma, Wash	3	19	170.	2930.	15.8	5.8	29	47	76
Tennessee & Ky Texas, Louisiana &	10	48	850.	6190.	20.8	13.7	10	. 34	44
Okla	18	96	1020.	9010.	18.8	11.3	18	40	58
Vermont, (State)	3	38	250.	5740.	7.9	4.37	49	50	99
Washington, D. C	37	247	2017.	31050.	15.	6.49	32	44	76
Wilmington, Del	2	26	750.	3840.	7.7	19.5	50	23	73
Worcester, Mass	23	180	4480.	26070.	12.8	17.2	38	28	66
Canada	21	129	1985.	14660.	16.3	13.5	27	35	62
Mexico	4	70	600.	7530.	5.72	7.97	52	42	94
Foreign	4	136	386.85	15430.	2.94	2.5	55	54	109

Connecticut Valley Club Outing

The annual mid-summer meeting of the Technology Association of the Connecticut Valley will be held at the Hartford Yacht Club at Fenwick, Conn., Saturday, June 29th, 1912. This annual summer meeting is the one event around which the Tech men of the Valley revolve. It has been held at the Yacht Club for a number of years and the hospitality is generous and hearty. The boat leaves Hartford at 5 p. m., June 28th, and a special dinner will be served on the way to the club. A special program of sports has been prepared.

Send your subscription to the Alumni Fund now!

Suggestions Wanted

The July Review will contain articles on the Walker Memorial and on dormitories prepared by members of the committee who are working out the plans. It is of special importance that every Tech man who has any knowledge or interest in this matter should read these articles and send any suggestions to the committee that may assist in making this feature of the New Technology all it should be.

Through the courtesy of Mr. E. W. Rollins, '71, the members of the Technology Club of New Hampshire have been invited to his farm, "Three Rivers," Dover, N. H., on Sunday, June 30th. Dinner at 1.30 p. m.

Institute Confers 286 Degrees

Tuesday, June 4, was commencement day and Huntington Hall was crowded an hour before the graduating exercises by the class of 1912 and its friends.

The following twelve theses were selected to be read: Herbert Louis Woehling, electrical engineering; "An Investigation of the Time Factors in the Movements of Vehicles at the Boston Freight Terminals of the B. & M. Railroad."

Frank Elijah Starr, mining engineering and metallurgy; "An Investigation of Application of Suction to the Richards

Shallow Bed Pulsator Jig."

Kenneth Holmes Barnard, A.B., chemistry; "The Heat of Fusion of Iodine and the Use of Liquid Iodine as a Solvent in Determining Molecular Weights."

Sidney Logan Day, architecture; "A Design for a Small Summer Theatre."

Leonard Thompson Troland, biology; "Studies in the Theory of Visual Response."

David James McGrath, civil engineering; "An Investigation of the Water Power of the Reversing Falls at St.

John, N. B."

Kenneth Caleb Robinson, mechanical engineering; "The Effect of Fungi on Timber Strength, and a Means for Determining the Extent of Infection."

James Hawes Ellis, physics; "The Calibration of an Electric Wave Meter."

Pierre Drewsen, B.S., chemical engineering; "An Investigation of the Nature of the Flow of Liquids in Pipes to determine a Relation between Viscosity and Coefficient of Flow."

John Baldwin Glaze, S.B., electrochemistry; "On the Formation and De-

composition of Silicon Carbide."

Alfred Victor deForest, naval architecture; "Test on a Burgess-Wright Aeroplane."

Cornelius Anthony Duyser, sanitary engineering; "The Biology of the Trick-

ling Filter.'

There were two hundred fifty-eight degrees of bachelor of science awarded, twenty-two men were made masters of science and six were honored with the degree of doctor of philosophy. We commend Dr. Maclaurin's address to the graduates, to the readers of the Review. It is printed in another column.

Buffalo's Good Fund Record

The last regular meeting of the Buffalo Technology Club was held April 26 at the University Club of Buffalo. Twenty-five members enjoyed a good dinner followed by a bowling match, and increased enthusiasm was very pronounced.

Our President's visit this spring has aroused the feeling of loyalty to the highest pitch and we hope to maintain it by frequent informal meetings. The general feeling of the graduates in this neighborhood has been very much improved as we all realize that the individuality of the Institute is secure and we expect to do our part both financially and otherwise to further the movement for the greater and larger institution.

In regard to the Alumni Fund from this district, we are glad to be able to report that twenty-one per cent. of the men in this district have sent in their subscriptions which amount to over fifty per cent. of the money allotted for our territory. This report is good financially but we are not satisfied with the percentage of men which have subscribed, and hope shortly to make this one hundred per cent.

H. M. C.

Marriage of Professor Richards

Cards were recently received announcing the marriage of Prof. Robert H. Richards, at the head of the department of mining engineering at the Institute, to Miss Lillian Jameson of Jamaica Plain. The ceremony was performed by the Rev. Chauncey H. Hawkins of the Central Connregational Church, Jamaica Plain, and took place at the home of the bride's mother, Mrs. Robert E. Jameson, 32 Eliot Street, Jamaica Plain, June 8th. Miss Jameson is a graduate of Smith College and was for some years identified with educational work. Her father was for many years a prominent physician in Jamaica Plain.

PROFESSOR LINDGREN CALLED TO THE INSTITUTE

He is to become head of the Department of Geology, succeeding Dr. Jaggar, who will be Director of the Tech Volcano Observatory in Hawaii

An announcement of the greatest interest with reference to the re-organization of the geological department of the Institute was made by President Maclaurin as a part of his address to the students at the Commencement exercises in Huntington Hall. When it was announced that Dr. T. A. Jaggar, Jr., is to be director of the Hawaiian Volcano Observatory, and is to reside in the Islands for about five years, it was realized that he could no longer be the head of the department in Boston, and there was much guessing as to the way in which the situation would be solved. As usual Technology has attacked the question directly and has secured the man above all others in the country, who has the qualifications and the experience to direct properly the courses of such an institution, Professor Waldemar Lindgren of the U. S. Geological Survey, Washington.

Professor Lindgren comes to the Institute not as a stranger, for during two years or more he has been special lecturer on economic geology, so that the authorities have had an opportunity to see and measure him, while he has been able to learn of the Institute's methods.

Dr. Maclaurin noted how the place of geology among the studies of a great technical institution has in late years undergone a great change. "The time has come," he said, "when it is of importance only in its mining and natural history aspects. It is today recognized to be fundamental. A knowledge of it underlies not only mining, but all agriculture; its development has been along lines of importance in many departments of engineering. It was a geologist, and one from the Institute, indeed, who passed on the safety of the great aqueduct tunnel that is soon to supply New York with water. The geologist of today is fundamental to many projects, and the necessity of conservation becomes more and more evident, and man realizes that he can gain his materials from the depths of the earth instead of by merely scraping them from its surface, the broad-minded, well-trained geologist is to be an ever-

increasing factor to industry."

The re-organization at the Institute was outlined by Dr. Maclaurin. is to be established a new chair, the William Barton Rogers professorship of economic geology. This will be a memorial pecularly fitting to the great Virginian who founded the Institute of Technology. Himself a geologist, he was impressed with the value of economic geology. The more possible is it now to establish such a memorial through the great gift to the Institute of his wife and helpmeet, Mrs. Rogers, for the Institute can now afford to lay aside a portion of the bequest for the endowment of the new chair, which it is expected will be devoted largely to research.

Professor Lindgren will also be named head of the department of geology at Tech. Dr. Jaggar will be director of the observatory as already noted; Dr. Reginald A. Daly will for the present remain professor of physical geology; Dr. Charles H. Warren will be advanced to full professorship from associate professor; Dr. Harvey A. Shimer will be promoted to associate professor; Dr. Frederick H. Lahee, now at Dartmouth, will become instructor and Mr. John D. MacKenzie, '11, will be instructor, the two last-named replacing Dr. Loughlin

and Mr. Goodspeed, resigned.

Professor Lindgren, Swedish by birth, has been connected with the U. S. Geological Survey for a long time. He was chief of field parties, becoming two or three years ago chief of the division of statistics of the metals, and six months

The Cast of Tech Show, 1912

ago, chief geologist. His work is known everywhere and his writings are voluminous, including several of the huge monographs of the Survey, while his lectures to the Technology students are now in press. He is a member of the National Academy of Science, the Geological Society of America, the A. A. A. S., etc.

Dr. Lahee will fill a serious lack at the Institute, since Dr. Jaggar has gone, with his intimate knowledge in a geological way of the surroundings of Boston. Dr. MacKenzie, now instructor at Cornell, brings great practical knowledge, having been with the Canadian Geological Survey in different mountain regions of the Dominion for six or seven years.

Five Year Classes Celebrate

The July number of the Technology Review will contain some interesting accounts of the way the different five-year classes celebrated their anniversaries in Boston and along the sea shore.

The class of '72, which celebrated its fortieth anniversary, held a special dinner in Boston which was hugely enjoyed by all those who participated. The affair was engineered by the class secretary, Prof. C. Frank Allen of the civil

engineering department.

The class of '82, which celebrated its thirtieth anniversary, had an informal dinner at the Braeburn Club, June 3, and on June 4 had a field day and luncheon at the Brigham Hill Farm at Grafton, Mass., whence they were carried in autos. At six o'clock there was a dinner at Riverbank Court, and from there the class went to the Pop concert where they had an honored place. The guests of the class were Dr. Maclaurin, Prof. Richards, Prof. Cross, Prof. Burrison, and Prof. Whitaker.

The class of '87 met at Hotel Moorland, Bass Rocks, Saturday noon, being transported from Boston by automobiles. At twelve o'clock a special train left the North Station carrying the class of 1912 who had been invited to help celebrate the quarter centennial of '87. The trip to Gloucester was made interesting by

the class band which furnished music for drill during the freshman year, and which had evidently not played together much since. As the trolley cars bearing this unusual music passed through Gloucester all business was suspended. afternoon was given over to baseball, the class of '87 and '12 having a duel between representative picked nines which be-labored a soft ball; and afterward by two scrub nines chosen from the class of It was a memorable day the newly made alumni. On the 2nd there was a clam bake at Sebacco Island, and on Monday a varied program was carried out. Men wearing good clothing were roughhoused until they were reduced to the appearance of the general average. Tuesday evening the class returned to Boston where they attended the Pop concert in a body.

The class of '92 went to East Falmouth where they had a glorious time together, returning in time for the Pop concert on Tuesday night. It was the first gathering of the kind the class has ever had and has started a new era in the class.

The class of '97 had some sixty or more men at Osterville, where the time was delightfully spent. President Maclaurin and J. W. Rollins, president of the Alumni Association, were guests of the class.

The class of '02 held its reunion at Princeton Inn whence they returned to the Pop concert with a determination that those present would never miss one of these five year reunions.

The class of 1907 will go the the Bursar's farm on the 15th, 16th and 17th, and expect to have about seventy-five

men.

Watch the class news in the July RE-VIEW for full accounts of these various outings with illustrations.

Rotch Prize Awarded

The scholarship of \$2,200, which means two years travel and study in Europe, was awarded to C. C. Clark, an architectural student at the Institute, at the closing banquet of the Boston Society of Architects.

SOME CHANGES IN THE TEACHING STAFF

Professor Despradelle becomes head of the Department of Architecture—Professor Miller heads Mechanical Engineering Department and Dr. Walker Chemical Engineering,—Mr. Burrison assistant professor

The following are the changes and new appointments in the instructing staff of the Institute as approved by the Corporation at its meeting May 31.

Professor T. A. Jaggar, Jr., professor of geology, has been appointed director of the Hawaiian Volcano Observatory.

Professor Désiré Despradelle becomes head of the department of architecture from which Professor F. W. Chandler resigned a while ago; Professor E. F. Miller is advanced from acting head of the department of mechanical engineering to full head.

Prof. W. H. Walker has been made head of the chemical engineering department. Professor Walker has been professor of industrial chemistry at the Institute since 1894, and holds degrees from Pennsylvania State College and the University of Gottingen, Germany. He is director of the research laboratory of applied chemistry, and has been connected with many industrial chemical improvements. He was special lecturer at Harvard on industrial chemistry from 1905 to 1908.

The following associate professors have been promoted to full professorships:— F. J. Moore, organic chemistry; C. L. Adams, drawing and descriptive geometry; O. E. Fuller, theoretical and applied mechanics; C. F. Park is appointed professor of mechanism; and W. A. Johnston, professor of theoretical and applied mechanism.

Four assistant professors have been advanced to associate professorships:—W. K. Lewis, chemical engineering; C. W. Berry, heat engineering; H. W. Hayward, theoretical and applied mechanics; and C. J. Riley, heat engineering.

Seven instructors have been promoted to assistant professor:—R. P. Bigelow, who is librarian also, zoölogy and parasitology; H. K. Burrison, mechanical

drawing and descriptive geometry; W. H. James, mechanical drawing; L. S. Smith, theoretical and applied mechanics; O. R. Hayward, mining engineering and metallurgy; H. R. Kurrelmeyer, German; and N. C. Page, physics.

Research assistant, H. F. Thompson, who has been conducting the experiments touching the efficiency of motor trucks, is appointed research associate; research associate Charles A. Kraus is made assistant professor of physicochemical research; assistant J. P. Maxfield is made instructor in physics, and assistant Franz Schneider, Jr., is appointed instructor in biology and public health.

Fifty-four other members of the instructing staff were re-appointed at the same meeting of the Corporation.

In the department of electrical engineering the new appointments are the following:—R. J. Wiseman, '12, assistant replacing R. M. George; A. P. Kitchen, Penn. State College,'12, replacing V. S. Foster; and Norman Osann, University of Wisconsin, '12, replacing E. P. Slack.

In the department of naval architecture and marine engineering, R. M. Pulsifer, '12, has been appointed assistant.

In chemistry and chemical engineering there have been many changes beside the change of title to Professor William H. Walker. Ralph White, M.A., becomes instructor in inorganic chemistry, replacing Dr. P. S. Fiske, resigned; Duncan MacRae, B.S., assistant in theoretical chemistry, replacing H. B. C. Allison; Wylie J. Daniels, A.B., half-time assistant in air and water analysis, replacing R. W. Gilbert; Wallace J. Murray, S.B. assistant in organic chemistry replacing B. F. Courtney; Christopher Fallon,

asssistant in analytical chemistry, replacing J. S. Gravely; Samuel A. S. Strahan, assistant in inorganic chemistry, replacing A. S. Chesley; John V. Mac-Donough, S.B., '12, of Watertown, assistant in analytical chemistry, replacing R. T. Haslan; Frank Day Bishop, B.S., '12, of Springfield, assistant in technical analysis, replacing C. E. Peel; Clarence K. Reinan, B.S., assistant in analytical chemistry, replacing R. W. Lewis; R. E. Zimmerman, Ph.B., B.S., is promoted from assistant in analytical chemistry to instructor in theoretical chemistry; Hugo H. Hanson, B.S. (1030 Tremont St.), Boston, '12, appointed research associate in applied chemistry; and Cornelius A. Duyser, B.S., '12, of Winsted, Conn., is appointed research associate in applied chemistry.

The Intermountain Tech Association

In response to an invitation to the Tech men in the vicinity of Salt Lake City to get together and form a Tech association, eleven Tech men,—Messrs. Cannon, Mendenhall, Wells, Whitemore, Leavell, Gilkison, Dexter, Daley, Rood, Stiebel, and Dort-met at the Salt Lake Commercial Club Saturday evening, April After an excellent dinner, the business of the evening was in order and the meeting was called at 9.30 p.m. with Mr. Dort acting as chairman and Mr.

Gilkison secretary pro tem.

After a more or less informal discussion it was decided to form a Tech association, inviting all Tech men especially those in the vicinity of Bingham and Salt Lake City to become members. It was moved by Mr. Mendenhall that the association be named "The Intermountain Association of M. I. T." This motion was amended to "The Intermountain Technology Association." The amendment was adopted unanimously. The motion as amended was carried. Mr. Leavell made the motion that a president, first vice-president, second vice-president, and a secretary-treasurer be elected. Mr. Mendenhall nominated J. C. Dort for president. Mr. Rood nominated B. W. Mendenhall for president. Moved and carried that nominations be closed. Mr. Mendenhall was unanimously elected president.

Mr. C. W. Whitley nominated and unanimously elected as first vice-president. Mr. L. T. Cannon was nominated and unanimously elected second vicepresident. Mr. J. C. Dort was unanimously elected secretary-treasurer.

It was voted that the president with two men whom he should elect should prepare a constitution and by-laws, to be acted on at the next meeting. Mr. Leavell made the motion that the men present should each contribute \$1.00 toward their annual dues so that the association might start on a sound financial basis. The motion was carried and the treasurer received eleven dollars.

Mr. Rood in behalf of the Bingham delegation invited the members of the I. T. A. to visit Bingham Canyon at the next meeting of the association. invitation was unanimously accepted.

It was voted to hold the next meeting the last Saturday of May. The men are to go to Bingham Canyon Saturday afternoon May 25 and stay till Sunday afternoon. Mr. Leavell led in a "We are happy" that echoed throughout the building, after which the men sang the old Tech songs, talked of bygone days, the New Technology, and adjourned at J. C. DORT. 11.30.

Death of C. A. MacClure, '94

C. A. MacClure of MacClure & Spahr, Pittsburg, Pa., died April 29, 1912. Colbert A. MacClure was born at Delphi, Carroll County, Indiana, March 27, 1870. He attended public school at Delphi until he went to Boston to attend the Institute. He was graduated with the class of 1894 and thereafter was associated with Peabody and Stearns, architects of Boston until he came to Pittsburg. In 1900 he entered into partnership with A. H. Spahr under the firm name of MacClure & Spahr, and continued in that partnership until his death on April 29, 1912. On September 17, 1902, he married Annabel Ree, of Baltimore, by whom he is survived, together with one daughter born in 1905.



How it looked to the Herald artist

An Enthusiastic Pop Concert

The attendance at the Pop concert held June 4 was larger than that of any other Technology night at the Pops since they were started. Enthusiasm ran high, largely due to the fact that the five year classes, which had been holding reunions at different places along the shore, had just returned from their outings and were full of the spirit of Technology. The class of 1912 was greeted with uproarous applause and cheering as it marched into the hall and received its alumni banner.

The culminating feature was introduced about nine o'clock when the lights were dimmed and a spot light fixed on the great Technology banner at the top of the proscenium arch. Back of this banner slowly unrolled a large sheet bearing the words: "Have you subscribed to the Alumni Fund?" The

spot light was then turned to the rear of the hall where from behind portiéres, emerged a float devoted to showing the absolute need of a worthy offering from the alumni to help build the new Institute. Sitting on the throne in front was a man wearing a mask who symbolized the mysterious "Mr. sMITh," donor of the two millions and a half for the educational buildings. On one side was a figure representing Mr. duPont carrying a banner on which was inscribed: started it with five hundred thousand dollars. What will the alumni give? duPont." On the same side of the float was a figure representing the Indian on the seal of the Commonwealth of Massachusetts, representing the State, and on his banner was printed: "I am paying the coal bill. The alumni must build the buildings." On the other side of the floatwas a figure representing Mr. Greene, who

left six hundred thousand dollars to the Institute by will. On his banner was inscribed: "I followed with six hundred thousand dollars. What will the alumni give?" Another figure representing Mr. Pratt who left a bequest of seven hundred fifty thousand dollars for the naval engineering department. This banner read: "Mine's coming later. Yours must come now." "Mr. sMITh's" position as given by the banners was: "I started the buildings; the alumni must complete them." In the middle of the float, back of Mr. Greene, was a figure carrying a large wreath in commemoration of Mrs. Rogers. In front of the figure representing our great benefactor was a youth sitting at his feet, representing the Alumni Fund. The float was escorted by seniors in cap and gown, bearing class banners. The procession moved from the rear of the hall to the stage where the float was turned about so that each side could be seen, and then the mysterious "Mr. sMITh" rose and explained the necessity of the Alumni Fund.

As he introduced the Alumni Fund boy a great cheer arose from the audience and the float started back toward the rear of the hall. The alumni boy began throwing out subscription cards for the Alumni Fund. The return trip was the signal for a storm of confetti and streamers from the balconies and at the same time gilt disks of card board representing gold were showered on the float from above. The effect of the spectacular display was pleasing and at the same time it emphasized the real need that the Institute has for a large sum of money to be devoted to purposes for which we have absolutely no other funds.

To Professor Gardner of the architectural department principal credit for the successful pageant is due, although the plan was evolved by the general committee on the Pop concert of which Professor Gardner was a member.

Send your subscription to the Alumni Fund now!

Huntington Hall Frieze Completed

During the last five or six years students of the architectural department have been filling in the undecorated spaces in the frieze of Huntington Hall. Five panels were put into place a year ago and now the last five have been added, completely filling all the space and making a total of thirty-six.

This is a decoration that is unique in this country, the Institution reproducing itself on its own walls in permanent

form, by its own students.

The suggestion came from Professor Despradelle but Prof. W. F. Brown of the architectural department evolved the method of restoring the frieze, and it was through his suggestion and oversight that the entire work looks almost like the production of one artist. Thirty-six subjects in full size figures are represented, working principally along the line of the technical courses at the Institute.

The panels for the frieze have been the regular work of the fifth year stu-

dents in architecture.

Technology to Help Cambridge Boys

The assistance given by the city of Cambridge and many of its citizens in helping to clear away the obstacles that stood between the Institute and the Cambridge site has been recognized by a proposal to grant a certain number of scholarships to Cambridge boys. Fees will be remitted according to the merits of the individual cases up to the full two hundred and fifty dollars yearly tuition. The total amount of scholarship assistance will not be definitely fixed but will be determined by the needs and the merits of the candidates and by the other claims on the scholarship funds.

In issuing the statement in regard to the scholarship, Dr. Maclaurin said: "I hope that these scholarships will be accepted by the citizens of Cambridge as an evidence of the good will of the Institute to the city in which it is to make its

home."

"THE HALL MARK OF TECHNOLOGY"

President Maclaurin's address to the graduates at the Commencement exercises of the Class of 1912

Last year, we closed the first chapter of the history of the Institute, the record of half a century's existence. Now we have turned the page and entered upon a new chapter, and if the tone of that chapter is to be guessed from that of its opening phrases, we cannot fail to be impressed by the contrast between the old and the new.

Fifty years ago the Institute existed only on paper, its one great asset being Rogers, and the power and potency of his ideas in the field of education. A few hundred, at the most, knew of it even as a name, it was to take years of pioneering effort to teach the great world that what it stood for was one of the great forces making for progress in the modern world. The recognition of this has come slowly. but it has come, and all who know the history of the Institute realize that it has contributed greatly to this recognition. And here I should like to suggest to all that are associated with Technology, the duty of knowing its history, and knowing it well. It is worth knowing for many reasons, amongst others because it brings you into close contact with at least two men of exceptional power and exceptional attractiveness -its early Presidents, Rogers and Walker. Rogers was an economic geologist of the highest eminence, a man whose scientific attainments were fittingly recognized by his election to the presidency of the National Academy of Sciences. Rogers was very much more than this, but unless such facts are known to Institute men, they may not appreciate the significance of what is going on today. Thus, the Corporation has recently agreed, through its executive committee, to strengthen the department of geology by founding the William Barton Rogers professorship of economic geology. This is to be an endowed chair devoted chiefly to scholarly research in the domain of

geology, and its first occupant is to be Professor Waldemar Lindgren, chief geologist to the United States Government, a member of the National Academy of Sciences and a worthy successor to Rogers in the field of his own specialty. The story of Rogers' life has been fittingly told by a member of the Institute's Faculty, and these volumes are accessible to all who may be interested. We are not so fortunate with regard to Walker, and I hope that while the material is available, and men who knew Walker intimately are still with us, the story of Walker's life will be told with something of the same skill as has been shown in portraying Rogers. These two men, more clearly than any others, have set forth the ideals for which the Institute stands, but I do not wish to suggest that by knowing their history you know the whole story of the Institute. No Technology man really knows the history of his alma mater unless he knows something of the contributions, the great contributions that the alumni have made to the solution of the vast practical problems with which the Republic has been confronted. These contributions are certainly part and an important part of the Institute's history and all loyal Technology men should know them. As a distinguished foreign captain of industry has said with reference to the Institute. "It is the spirit and energy of its alumni, their conspicuous practical knowledge and the power of adaptation and resource that they have displayed in attacking the problems presented to a nation developing with unexampled speed that has made the M. I. T. known and respected wherever solid achievement of this kind is appreciated at all."

And so we have entered upon the second half century of our history in very different circumstances from those in which the first was begun. I need scarce-

ly say that this first academic year of the new era must long be a memorable one with Institute men. I congratulate the class of 1912 on bearing a name—1912 that must mark an epoch in the Institute's history; the year in which the new site was acquired a site that made possible a great improvement in educational facilities and an adequate provision for social and athletic life such as had long been desired, but had never before been possible of attainment; the year, too in which friends old and new came forward with gifts of unexampled munificence as tributes of appreciation of the good work that had been done by the old Technology and of faith in the even greater usefulness of the new.

And now the time has come when I am to confer degrees on you gentlemen of the graduating class. You graduate, as I have said, in a memorable year, may you make it still more memorable by your own achievements. Realize now and always the responsibility of living up to the expectations of your fellows with reference to the graduates of this Institute. You bear Technology's hall-mark, a signal honor that proves you to have measured up to its standards while here. But a severer test awaits you. You must measure up to the standards that the world has set for the estimation of Technology men. It is a severer test because it is applied not through a few years only, but throughout your life-time. You have learned in 1912 that the Institute owes most of the successes of that memorable year to the fact that its alumni have proved their efficiency and have served society honorably and well. Never permit yourselves to forget that its success in solving such similar problems as will inevitably arise in the future will depend mainly on what you do. standards of professional skill and of professional honor that you maintain must be the very highest—that your alma mater expects of you. I You need have no misgivings as to your success, provided, of course, that health be granted and provided that the gospel of work that has been preached to you in this Institute is accepted as a life long faith. You must,

of course, have the wit to seize such opportunities as present themselves and one of the opportunities that Technology men too often miss is the opportunity that comes from association with their fellow alumni. These men come from nearly all quarters of the globe, and they scatter still more widely. Everywhere they are to be found in positions of power and responsibility and almost everywhere they are ready to hold out a hand of welcome and of help, if necessary, to their fellow alumni. In the name of the Corporation, the Faculty and the Alumni, I congratulate you on the success that is celebrated today, and most heartily wish you similar success in the school of practical life that you now enter.

Pittsburg Smoker, June 5

The Pittsburg Association of the Massachusetts Institute of Technology held their last smoker of the season 1911–1912 at the University Club, Pittsburg, on Wednesday evening, June 5 at 8 p. m.

The occasion was a revival of good fellowship and was largely devoted to the latest news from the scene of greatest activity in the country—the Alumni Fund Committee of the Massachusetts Institute of Technology. The operations. methods, and achievements were graphically recited by Sumner B. Ely, '92 who is chairman of the Pittsburg district operations. All the papers, data and facts presented were scanned and analyzed carefully, and, as a result, plans have been laid to battle with our Cleveland friends whom we find have outstripped us, just a shade, in the number of subscriptions to date.

This we have taken to heart seriously, and our efforts will be redoubled to bring the delinquents into the fold. A great many appear to be waiting for the "other fellow" and we have posted notices to be sure and get in quickly on the ground floor. Many were the enthusiastic speeches delivered as to the necessity to subscribe—not entirely for the amount of the subscriptions, but for the largest number of subscriptions.

Action was then taken by the associa-

tion upon the death of Colbert A. Mac-Clure, '94, who died in Pittsburg, April 29, 1912. This was the first opportunity the association had as a body to pass resolutions. The association deeply deplores this untimely death, both for the Institute at large and the association locally. Mr. MacClure was always one of our strongest supporters.

The evening was spent in a delightfully social manner. A fine luncheon was served, and toasts and Tech songs were

interspersed.

We had with us Mr. Norman S. Wooldridge, '86, of the Equitable Life Assurance Company, an old Tech man, who has recently allied himself with our association. Mr. Leland Wood of Taunton, Massachusetts, also spent the evening with us. Mr. Wood is a graduate of the Lowell Institute. We were delighted to have a visit from Mr. W. B. Reed who is now a senior at Tech and who lives at Crafton, Penn.

Mr. R. M. Hopkins, '00, manager of the Alberger Condenser Company, with offices in the Farmers' Bank Building, has

recently joined our association.

Officers were elected for the year 1912–1913 as follows:—president, Fred Crabtree, '89; vice-president, Morris Knowles, '91; sec'y-treasurer, L. K. Yoder, '95; executive committee, W. E. Mott, '89; Edward Seaver, Jr., '01; Harry A. Rapelye, '08; alumni correspondent, Sumner B. Ely, '92.

L. K. Y., '95.

Fund Meeting in Albany

The Technology Fund was the subject discussed at the third dinner of the Technology Club of Albany at Keeler's Hotel, in Albany, on May 17, and Mr. Everett Morss, '85, chairman of the Alumni Fund committee was the speaker and guest of honor. Mr. Morss passed in review the various locations proposed at one time or another for the Institute, among them, the one near the Cambridge Stadium, the Jamaica Plain site, and the Allston Golf Club grounds, and he completed the list with an explanation of the negotiations which culminated in the present Cambridge site. The conditions

of both the splendid duPont gift and the magnificient contribution of the mysterious Mr. Smith were explained as underlying causes for the Alumni Fund, which is for the equipment of buildings and grounds. Two points were particularly emphasized by the speaker; first, that every former student of the Institute should subscribe to the Fund and second, that promptness is essential. This Fund will demonstrate to the world the loyalty of Tech men to the Institute and their ability to render it effective support. The response of a large percentage of students will, therefore, be a powerful object lesson. The classes have taken hold of the idea with great enthusiasm; one class has already subscribed its quota and has hardly more than started. importance of returning the subscription blanks promptly will be realized from the fact that it is hoped to formulate plans for the buildings this fall if the required sum is assured by that time. Every man is to be studied until the proper avenue of approach is found.

On account of unavoidable conflicts with other events the attendance was not as large as had been expected. President McKim, '86, E. A. Brainerd, '97, Russell Suter, '00, W. G. Wildes, '01, A. O. True, '05 and E. H. Sargent, '07, all of the State Engineering Commissions represented Albany; W. H. Towne, '02 came all the way from Hudson to be present; and Vicepresident Whitney, '90, Dr. W. D. Coolidge, '96, N. J. Kingsbury, '02, S. Haar, '04 and J. R. Baldwin, '09 all General Electric men were present from Schenectady.

Miss Stickney's Campaign

Miss Delia M. Stickney, '89, is leading the campaign for the introduction of domestic science into the curriculum of all women's colleges. According to Miss Stickney the college woman alone is deprived of this course of study. The course in domestic science as urged by Miss Stickney includes sanitation, chemistry of food and household management. Miss Stickney is a graduate of the Massachusetts Institute of Technology, where she specialized in domestic science.

THE MASSACHUSETTS INSTITUTE OF TECHNOLOGY

Boston, Mass.

THE MASSACHUSETTS INSTITUTE OF TECHNOLOGY aims to give thorough instruction in Civil, Mechanical, Chemical, Mining, Electrical, and Sanitary Engineering; in Chemistry, Electro-chemistry, Architecture, Physics, Biology and Public Health, Geology, and Naval Architecture.

To be admitted to the Institute, the applicant must have attained the age of seventeen years, and must pass examinations in algebra, plane and solid geometry, physics, history of the United States (or ancient history), English, French and German. Preparation in some one of a series of elective subjects is also required. A division of these examinations between different examination periods is allowed. In general, a faithful student who has passed creditably through a good high school, having two years' study of French and German, should be able to pass the Institute examinations.

Graduates of colleges, and in general all applicants presenting certificates representing work done at other colleges, are excused from the usual entrance examinations and from any subjects already satisfactorily completed. Records of the College Entrance Examination Board, which holds examinations at many points throughout the country and in Europe, are also accepted for admission to the Institute.

Instruction is given by means of lectures and recitations, in connection with appropriate work in the laboratory, drawing-room or field. To this end extensive laboratories of chemistry, physics, biology, mining, mechanical engineering, applied mechanics, and the mechanic arts, have been thoroughly equipped, and unusual opportunities for field-work and for the examination of existing structures and industries have been secured. So far as is practicable, instruction is given personally to small sections rather than by lectures to large bodies of students.

The regular courses are of four years' duration, and lead to the degree of Bachelor of Science. In most courses the work may also be distributed over five years by students who prefer to do so. Special students are admitted to work for which they are qualified; and the degrees of Master of Science, Doctor of Philosophy, and Doctor of Engineering are given for resident study subsequent to graduation. Opportunity for research is offered in all the departmental laboratories, in the three recently established Research Laboratories of Applied Chemistry and Physical Chemistry, and in the Sanitary Research Laboratory and Sewage Experiment Station.

The tuition fee, not including breakage in the laboratories, is \$250 a year. In addition, \$30 to \$35 per year is required for books and drawing materials.

For catalogues and information, address

ALLYNE L. MERRILL, Secretary of the Faculty.

491 Boylston Street, Boston.